

## CLAIMS

1. A method of loading a class file into a virtual machine, said class file being  
5 associated with a class, and said virtual machine operating in an object-oriented  
computing system, said method comprising:

loading said class file into a memory portion of the computing system;  
selecting information from said class file to be loaded into said virtual  
machine; and

10 loading said selected information from said memory portion into said virtual  
machine and not loading information not selected from the class file into the virtual  
machine.

2. A method as recited in claim 1, wherein the method further comprises:

15 encountering a request to a said class associated with a class file.

3. A method as recited in claim 1, wherein said selecting of information  
operates to select information from said class file that is likely to be used by the  
virtual machine.

20 4. A method as recited in claim 1, wherein said selecting of information  
operates to select information from said class file that is needed to be used by the  
virtual machine.

25 5. A method as recited in claim 1, wherein said selecting of information  
operates to select information that includes information associated with at least one  
method of said class.

30 6. A method as recited in claim 1, wherein said loading of only said selected  
information operates to create an internal representation of the class file in the virtual  
machine.

7. A method as recited in claim 6, wherein said internal representation of said class file includes a method reference portion.

8. A method as recited in claim 7, wherein said method reference portion includes a  
5 method name field, a method signature field, and a method code field.

9. A method as recited in claim 1, wherein said loading of only said selected  
information operates to populate said method name field, method signature field, and  
method code field with appropriate information or references to appropriate  
10 information.

10. A method as recited in claim 1, wherein said memory is a heap memory of said  
computing system.

11. A method as recited in claim 1, wherein the method further comprises:  
determining whether an internal representation of the class file exists in the  
virtual machine; and  
creating an internal representation of the class file in the virtual machine when  
said determining determines that an internal representation of the class file does not  
20 exist in the virtual machine.

12. A method as recited in claim 1, wherein the method further comprises:  
determining whether said class file exists in said memory portion; and  
loading said class file in said memory portion when said determining  
25 determines that said class file does not exist in said memory portion.

13. A method as recited in claim 1, wherein the method further comprises:  
removing said class file from said memory portion.

14. A method as recited in claim 13, wherein said removing is performed on a Least  
Recently Used basis.

15. A method of loading a class file into a virtual machine, said class file being associated with a class, and said virtual machine operating in a computing system, said method comprising:

encountering a request to use at least one method of a class associated with a class file;

determining whether said class file exists in a dedicated heap memory portion;

loading said class file in said dedicated heap memory portion when said determining determines that said class file does not exist in said dedicated heap memory portion;

selecting information associated with said at least one method of said class;

determining whether an internal representation of the class file exists in said virtual machine;

creating an internal representation of the class file in the virtual machine when said determining determines that an internal representation of the class file does not exist in said virtual machine; and

loading into the virtual machine said selected information associated with said at least one method of said class and not loading into said virtual machine information that was not selected.

16. A method as recited in claim 15, wherein the method further comprises:

removing said class file from said dedicated heap memory portion on a Least Recently Used basis.

17. A method as recited in claim 15, wherein said selected information includes a method name field, a method signature field, and a method code field with appropriate information or references to appropriate information.

18. A method as recited in claim 15, wherein said internal representation includes a reference cell associated with said at least one method.

19. A computer readable media, including computer program code for loading a class file into a virtual machine, said class file being associated with a class, and said virtual machine operating in an object-oriented computing system, said computer program code comprising:

5           computer program code for loading said class file into a memory portion of the computing system;

          computer program code for selecting information from said class file to be loaded into said virtual machine; and

          computer program code for loading said selected information from said  
10 memory portion into said virtual machine and not loading information not selected from the class file into the virtual machine.

20. A computer readable media as recited in claim 19, wherein said computer program code for selecting of information operates to select information from said class file  
15 that is likely to be used by the virtual machine.

21. A computer readable media as recited in claim 19, wherein said computer program code for selecting of information operates to select information from said class file that is needed to be used by the virtual machine.  
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